

a2

used in flexographic printing because of poor alcohol solubility.

In the Claims

Claims 1, 2, 5, 6, 18, 19, 26 and 29 have been amended as set forth below:

Sub B47

1. A solvent-soluble poly(urethane/urea) resin derived from a polyurethane prepolymer being the reaction product of:

(a) a diisocyanate component and a diol component having (i) a first diol having a molecular weight below 2000 and (ii) a polymeric diol having a molecular weight below 3000; wherein the -NCO/-OH ratio is less than 2 and containing 1.3 to 6.0 wt. % of unreacted -NCO groups and (b) diamine; wherein the amount of diamine is 80% to 120% based on the equivalents of unreacted -NCO groups and the polyurethane prepolymer is added at a controlled rate to the diamine.

a3

2. The resin of claim 1 wherein the first diol has a lower molecular weight than the polymeric diol.

5. The resin of claim 1 wherein the -NCO/-OH ratio is about 1.5.

a4

6. The resin of claim 1 having a weight average molecular weight between about 10,000 and about 80,000.

18. The resin of claim 16 wherein the polymeric diol is a polycaprolactone diol.

a5

a⁵
19. The resin of claim 18 wherein the polycaprolactone diol has a molecular weight of 2500 or less.

a⁶
26. The resin of claim 24 wherein R₂ contains from about 30 to about 80 equivalent % of R₄.

Subst B² > a⁷
29. A solvent-based flexographic and gravure compatible laminating printing ink comprising: (A) a solvent-soluble poly(urethane/urea) resin derived from a polyurethane prepolymer being the reaction product of:
(a) a diisocyanate component and a diol component having: (i) a first diol having a molecular weight below 2000 and (ii) a polymeric diol having a molecular weight below 3000; wherein the -NCO/-OH ratio is less than 2 and containing 1.3 to 6.0 % by weight of unreacted -NCO groups and (b) diamine; wherein the amount of diamine is 80% to 120% based on the equivalents of unreacted -NCO groups and the polyurethane prepolymer is added at a controlled rate to the diamine; (B) a colorant; and (C) an organic solvent.

Remarks

Of Claims 1-54 in the application, Claims 50-54 are hereby withdrawn from consideration and Claims 1, 2, 5, 6, 18, 19, 26 and 29 have been amended to clarify the subject matter of the invention. No new matter has been added by such amendments.

The Appendices as attached hereto are marked versions of the amended paragraphs and claims wherein the amendments are indicated by brackets and underlines.